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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,959	08/14/2004	Scott L. Nielson		4958
45557	7590	06/29/2006	EXAMINER	
IBM CORPORATION (JSS) C/O SCHUBERT OSTERRIEDE & NICKELSON PLLC 6013 CANNON MOUNTAIN DRIVE, S14 AUSTIN, TX 78749			FREJD, RUSSELL WARREN	
			ART UNIT	PAPER NUMBER
			2128	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/710,959	NIELSON ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Russell Frejd	2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 14 August 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-39 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

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***Examination of Application #10/710,959***

1. Claims 1-39 of application 10/710,959, filed on 14-August-2004, are presented for examination.

***Oath/Declaration***

2. The Examiner respectfully notes that the Oath is not signed.

***Claim Objections under 37 CFR 1.75(d)(1)***

3. Claims 1, 7-9, 12, 14, 20-22, 25, 27, 33-35 and 38 are objected to under 37 CFR 1.75(d)(1), wherein --

The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See 1.58(a))

In regard to claims 1, 14 and 27, the use of the term "and" on lines 4 and 6 should be deleted.

In regard to claims 7, 20 and 33 on line 8; claims 8, 21 and 34 on lines 3 and 5; claims 9, 22 and 35 on line 3; and claims 12, 25 and 38 on line 5; the use of the period needs to be deleted.

***Claim Rejections under 35 U.S.C. § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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**4.1** Claims 1-39 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The invention claims (claim 1 preamble), “*A method to automatically create a three-dimensional nail object.*”

**4.2** MPEP Section 2106(IV)(B)(2)(b)(ii) provides that a statutory computer process is determined not by how the computer performs the process, but by what the computer does to achieve a practical application with a useful, concrete and tangible result. For example, a computer process that simply calculates a mathematical algorithm that models noise is nonstatutory, while a claimed process for digitally filtering noise employing the mathematical algorithm is statutory. The long line of cases in this area that are referred to in MPEP Section 2106(IV)(B)(2)(b)(ii) exemplify this requirement, by utilizing in the claim language, terms such as controlling, executing, changing and removing. In view of the aforementioned requirement and the interim guidelines for 101 eligibility, the Examiner respectfully contends that the claim language of independent claims 1, 14, and 27, do not claim a practical application with a tangible result, that language claiming: (in claim 1) **starting** (emphasis added) with a three-dimensional array of data representing a digitized nail surface; **measuring** key reference points along the nail surface along the X-axis, Y-axis and Z-axis; **using** supplied parameters to automatically create a desired three-dimensional representation of an artificial nail object, by **generating** new three-dimensional data along the X-axis, Y-axis and Z-axis as determined by the supplied parameters, and the final nail object is a **combination** of the digitized nail surface and the generated three-dimensional surface so as to **create** a desired artificial nail object that conforms to an expected result so that the nail object will fit over the digitized nail surface and create a desired artificial nail appearance.

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**4.3** For at least these reasons, the Examiner respectfully posits that the claims of the present invention do not meet the criteria for a statutory process. Accordingly, the claims are determined to be a method to automatically create a three-dimensional nail object, consisting solely of mathematical operations, converting one set of numbers into another set of numbers, whereby the method does not manipulate appropriate subject matter, and thus cannot constitute a statutory process (MPEP Section 2106(IV)(B)(2)(c)).

**4.4** The Examiner respectfully posits that claim 27-39 of the present invention do not meet the criteria for a statutory process, as these claims are determined to be a program per se, consisting of software modules that implement the method to automatically create a three-dimensional nail object, whereby the method does not manipulate appropriate subject matter, and thus cannot constitute a statutory process (MPEP Section 2106(IV)(B)(2)(c)).

### ***Claim Rejections under 35 U.S.C. § 102***

**5.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**5.1** Claims 1-3, 5, 6, 8-16, 18, 19, 21-29, 31, 32, and 34-39 are rejected under 35 U.S.C. 102(a) as being anticipated by Yogo et al., hereinafter Yogo, USP Publication 2004/0143359 A1.

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**5.2** Claims 1, 14 and 27: A method to automatically create a three-dimensional nail object [sec. 0002] , comprising: starting with a three-dimensional array of data representing a digitized nail surface, and; measuring key reference points along the nail surface along the X-axis, Y-axis and Z-axis [0030], and; using supplied parameters [0009] to automatically create a desired three-dimensional representation of an artificial nail object, by generating new three-dimensional data along the X-axis, Y-axis and Z-axis as determined by the supplied parameters [0030], and; the final nail object is a combination of the digitized nail surface and the generated three-dimensional surface so as to create a desired artificial nail object that conforms to an expected result so that the nail object will fit over the digitized nail surface and create a desired artificial nail appearance [0033].

Claims 2, 15 and 28: wherein starting with a three-dimensional array of data representing a digitized nail surface includes any data that can be used to represent a three-dimensional object [0009, 0028, 0030].

Claims 3, 16 and 29: wherein the three-dimensional array of data may be represented as points of data representing an X-axis, Y-axis and Z-axis [0030].

Claims 5, 18 and 31: wherein measuring key reference points includes determining the arc of the nail surface along the X-axis and/or determining the arc of the nail surface along the Y-axis [0030 and 0035].

Claims 6, 19 and 32: wherein measuring key reference points includes evaluating three-dimensional points along the periphery of the nail surface [0031 and 0032].

Claims 8, 21 and 34: wherein using supplied parameters includes constant parameters that are predetermined. Where these parameters include predetermined curves, lengths, widths and

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heights, which are consistent with the desired object dimensions. These constants may be changed to create the desired nail object [0009].

Claims 9, 22 and 35: wherein using supplied parameters includes supplying the parameters at the time the object is created. Where these parameters include predetermined curves, lengths, widths and heights, which are consistent with the desired object dimensions [0009].

Claims 10, 23 and 36: wherein generating new three-dimensional data includes using the supplied parameters to mathematically create new three-dimensional data that forms the top surface of the desired nail object, where the supplied parameters dictate the top surface data that is generated [0030 and 0035].

Claims 11, 24 and 37: wherein generating new three-dimensional data includes using the supplied parameters to mathematically create new three-dimensional data that forms a nail tip for the desired object, further where any potential holes in the three-dimensional data occur, they are filled during the generation method [0033 and 0035].

Claims 12, 25 and 38: wherein the desired nail object is achieved by combining the new generated surface as the top surface of the desired nail object and the digitized nail surface forms the bottom surface of the desired nail object. The two surfaces are then combined to create the desired nail object [0035].

Claims 13, 26 and 39: wherein the desired nail object in its final state is a customized three-dimensional object representing an artificial nail that is desired, which fits over the digitized nail surface [0034].

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***Claim Objections***

6. Claims 4, 7, 17, 20, 30 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Yogo does not specifically disclose measurement values in millimeters or inches, nor points 2/3rds the distance from the edge of the cuticle.

***Response Guidelines***

7. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned (see MPEP 710.02, 710.02(b)).

**7.1 Any response to the Examiner in regard to this non-final action should be**

**directed to:** Russell Frejd, telephone number (571) 272-3779, Monday-Friday from 0530 to 1400 ET, or the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279. Inquires of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist (571) 272-2100.

**mailed to:** Commissioner of Patents and Trademarks  
P.O. Box 1450, Alexandria, VA 22313-1450

**or faxed to:** (571) 273-8300

Hand-delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA, 22314.

Date: 24-June-2006

Russell Frejd

RUSSELL FREJD  
PRIMARY EXAMINER